DOCUMENT RESUME

ED 282 239 CS 210 538

AUTHOR	Englert, Carol Sue; And Others
TITLE	Establishing a Case for Writing Intervention: The What and Why of Expository Writing. Occasional Paper No. 111.
INSTITUTION	Michigan State Univ., East Lansing. Inst. for Research on Teaching.
SPONS AGENCY	Office of Special Education and Rehabilitative Services (ED), Washington, DC.
REPORT NO	IRT-OP-111
PUB DATE	Apr 87
GRANT	G008530201
NOTE	42p.
AVAILABLE FROM	Institute for Research on Teaching, College of Education, Michigan State University, 252 Erickson Hall, East Lansing, MI 48824 ($4.00).
PUB TYPE	Guides - Classroom Use - Guides (For Teachers) (052)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	Advance Organizers; Classroom Environment; Elementary Education; *Expository Writing; Learning Disabilities; *Learning Strategies; Program Content; Remedial Instruction; Schemata (Cognition); Student Writing Models; Teaching Methods; Writing Difficulties; Writing Exercises; *Writing Improvement; *Writing Instruction; *Writing Processes
IDENTIFIERS	Audience Awareness; Text Structure

ABSTRACT

A successful expository writing program (1) should develop basic writing ability and fluency, (2) should convey to students that they are informants in a communicative context that includes writers and readers, and (3) should foster student control of the writing process including thinking and organizational strategies (such as planning, organizing, drafting, and revising. Writing problems in regular and special education classrooms differ in degree but not in type, and several samples of special education students' writing illustrate some of the strategies involved in writing improvement. The teacher must establish a writing environment where students write frequently and for sustained periods, alone and in collaboration with peers. Knowledge of text structures can help children activate schemata with details from their own experiences. The use of "think sheets" on planning and organizing can aid students in writing a first draft. Self-editing, peer editing, and revision also benefit from use of think sheet criteria, which remind teachers and students of appropriate strategies for different aspects of the writing process. Such strategies are best taught when the teacher assumes an active role as a mediator who models writing strategies and who evaluates strategy acquisition by monitoring changes in children's thinking and dialogue as well as changes in their compositions. (Two tables are included, and examples of different types of think sheets are appended, as well as a list of references.) (NKA)

ED282230

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Occasional Paper No. 111

ESTABLISHING A CASE FOR WRITING INTERVENTION: THE WHAT AND WHY OF EXPOSITORY WRITING

Carol Sue Englert, Taffy E.Raphael,
Linda M. Anderson, Helene Anthony,
Kathy Fear, and Stephanie Gregg

Published By

The Institute for Research on Teaching
College of Education
Michigan State University
East Lansing, Michigan 48824-1034

April 1987

This material is based upon work supported by the Office of Special Education and Rehabilitative Services under Grant Number G008530201. This work is sponsored in part by the Institute for Research on Teaching, College of Education, Michigan State University. The Institute for Research on Teaching is funded from a variety of federal, state, and private sources including the United States Department of Education and Michigan State University. Any opinions, findings, and conclusions or recommendations expressed in this paper are those of the authors and do not necessarily reflect the views of OSERS, the Department of Education, or the other funding agencies.

BEST COPY AVAILABLE

CS 210538

Institute for Research on Teaching

The **Institute for Research on Teaching** was founded at Michigan State University (MSU) in 1976 by the National Institute of Education. Following a nationwide competition in 1981, the NIE awarded a second five-year contract to MSU. Funding is currently received from the U.S. Department of Education, Michigan State University, and other agencies and foundations for individual research projects.

The IRT conducts major research projects aimed at improving classroom teaching, including studies of classroom management strategies, student socialization, the diagnosis and remediation of reading difficulties, and teacher education. IRT researchers are also examining the teaching of specific school subjects such as reading, writing, general mathematics, and science and are seeking to understand how factors outside the classroom affect teacher decision making.

Researchers from such diverse disciplines as educational psychology, anthropology, sociology, and philosophy cooperate in conducting IRT research. They join forces with public school teachers who work at the IRT as half-time collaborators in research, helping to design and plan studies, collect data, analyze and interpret results, and disseminate findings.

The IRT publishes research reports, occasional papers, conference proceedings, a newsletter for practitioners, and lists and catalogs of IRT publications. For more information, to receive a list or catalog, and/or to be placed on the IRT mailing list to receive the newsletter, please write to the IRT Editor, Institute for Research on Teaching, 252 Erickson Hall, Michigan State University, East Lansing, Michigan 48824-1034.

Co-Directors: Jere E. Brophy and Andrew C. Porter

Editor: Sandra Gross

Abstract

This paper reports on the expository writing difficulties of learning disabled students in fourth and fifth grades using actual samples of students writing. These samples were chosen because they represent the range of writing problems found not only in special education classrooms but in regular education classrooms. Writing problems in regular and special education tend to differ in degree but not in the type of problems they pose to teachers of writing. Next, an instructional program is suggested that might be used to rememdiate the expository writing problems of students with the characteristics described in this paper. The instructional program involves the teaching of strategies through the use of think sheets that focus on strategies for performing the writing process, as well as for enhancing students' awareness of the role of audience and text structure in planning, organizing, writing, editing, and revising their compositions.

ESTABLISHING A CASE FOR WRITING INTERVENTION: THE WHAT AND WHY OF TEACHING EXPOSITORY WRITING

Carol Sue Englert, Taffy E. Raphael, Linda M. Anderson
Helene Anthony, Kathy Fear, and Stephanie Gregg[1]

Three Goals of a Writing Program

Expository writing requires thinking and analytical skills that underlie skillful performance in content area subjects. To develop skillful expository writers, a successful writing program should be tied to three writing goals. First, the writing program should develop basic writing ability and writing fluency. Second, the writing program should convey to students that they are informants in a communicative context that includes writers and readers. Third, the writing program should foster student control of the writing process including the thinking and organizational strategies associated with planning, organizing, drafting, editing, and final revising.

These three goals serve as a framework for considering both problems experienced by special education students and an approach designed to reduce the problems these students experience. In the first section of this paper, we elaborate on the three writing goals using current literature on children's writing and drawing upon samples of students' writing that illustrate specific problems within each area. The writing samples were collected as part of an in-depth descriptive study of special education students' expository writing skills and writing curricula in eight special

---

[1]Carol Sue Englert, Taffy Raphael, and Linda Anderson are co-coordinators of the Cognitive Strategy Instruction in Writing Project. Englert is an assistant professor in the Department of Counseling, Educational Psychology and Special Education at Michigan State University. Raphael and Anderson are associate professors of teacher education at MSU. Helen Anthony, Kathy Fear, and Stephanie Gregg are research assistants with the project.

education classrooms. Fifty learning disabled (LD) students from the fourth- and fifth-grade levels participated in the study as they wrote two types of expository structures (i.e., comparison/contrast and explanation). We analyzed these samples for patterns suggesting specific writing difficulties and possible causes associated with these difficulties. In the second section of this paper, we describe an instructional program (Raphael, Kirschner, & Englert, 1986a) that was piloted with regular education students (Raphael, Englert, & Kirschner, 1986), and that is presently being implemented in eight schools with LD and regular education students. This program appears to be particularly useful in offsetting the difficulties experienced by students in attaining the three writing goals discussed above.

Basic Writing Ability and Fluency

The improvement of writing abilities and fluency is a goal listed on many children's instructional programs. While this goal often refers to the improvement of writing mechanics and production rates, a more critical concern should be the improvement of students' abilities to develop, sustain, and communicate their thoughts about an expository topic in an organized manner. Perhaps the most convincing evidence for the need for frequent sustained writing opportunities comes from the actual writing produced by special education students. Max,[2] a fourth-grade special education student, was asked to think of something he knew a lot about--such as a hobby, game, or a place he had been--and write about it for someone who didn't know anything about it. The story Max wrote is shown below.

---

[2]Pseudonyms are used for all names of students.

Bugs Bunny

She, is, funny?
She, walk, funny.
She: Mabel, me, cafe?

If we examine Max's performance, we can make some interesting observations about his writing. First, although he has some spelling and punctuation errors, Max's ideas are interpretable. Each of his sentences is comprehensible and conveys information to the reader. Furthermore, although remedial instruction usually involves a hefty dose of writing mechanics, it is obvious that Max's attention is already overfocused on figuring out mechanics. His insertion of commas after every word suggests that his attention is focused on deciding when commas should be used. Yet his attention may be so focused on these lower level concerns that it interferes with his ability to explore, discover, and retrieve ideas systematically about his selected topic. This is suggested by the fact that, in three short sentences, Max had exhausted all his ideas and thoughts about the subject. He seemed to lack strategies for generating new ideas.

Max's performance is fairly representative of the performance of the majority of special education students in our descriptive study of writing performance. Compared to other students, special education students did not perform as well in their ability to sustain thinking about a topic as indicated by the length and quality of their expository essays. In writing comparison/contrast and explanation papers, special education students' papers contained approximately one-half the number of ideas as those

produced by normally achieving students. However, when questioned by the interviewer, most special education students could tell far more about the topic than was represented in their written text. While a simplistic cause of limited writing output might be lack of ability in penmanship or motor difficulty, samples of students' productions obtained when students dictated stories indicate the solution is not that simple. Rather, the lower quality and quantity of writing suggested that problems, in part, might be due to alternative difficulties in accessing and selecting relevant information about familiar topics.

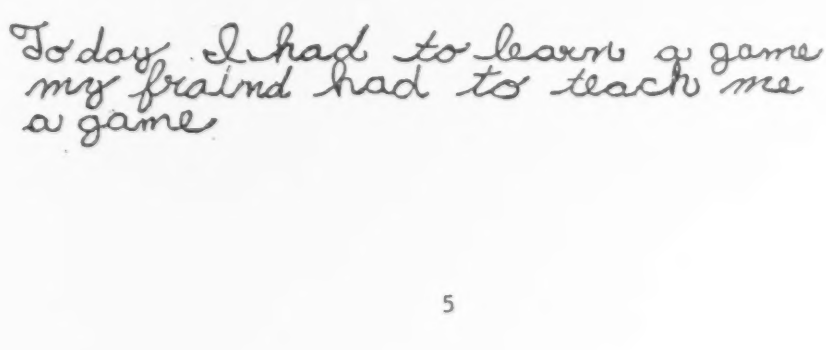
The problem of productivity discussed so far suggests that some learning disabled students may have difficulties in knowledge retrieval and organization. However, there are two instructional conditions necessary for the development of basic writing ability and fluency that can exacerbate this writing problem. These instructional conditions include the extent to which students have opportunities to (a) write frequently and (b) engage in sustained writing. Just as with any other academic or physical skill, the opportunity to practice frequently and engage in sustained activity is related to the fluency with which students can select, organize, and generate ideas. Teachers must foster writing fluency by scheduling daily writing opportunities and by encouraging students to sustain their writing and thinking in generating whole paragraphs and essays about their topic. Without such writing opportunities, students like Max will not develop their thinking skills or writing fluency.

Informant Status

Max's story also can be used to illustrate the second fundamental goal of a successful expository writing program. Important for successful expository writing is the writer's perception of himself or herself as being an informant to others. Lack of perception of oneself as an informant stems from both writer-related and curriculum-related problems involving (a) the writer's self-perceived competence and (b) a writing curriculum in which writing is used as a test-taking activity (e.g., writing to answer teachers' questions).

In Max's case, when told to pick a topic about which he was an expert, he selected Bugs Bunny. Bugs Bunny, however, is a fantasy, not a factual or expository character. Even within the framework of his chosen topic, Max did not quite achieve "informant" status. His paper actually conveyed very little information about Bugs Bunny: the reader learns nothing about who Bugs Bunny is, what [s]he looks like, or what Bugs Bunny does to make Max laugh.

Perhaps an even more striking example of a writer who lacks perception of herself as an informant is Rose. Rose was asked to think of something that she knew well (e.g., game, activity, etc.) and explain it in writing for someone else (i.e., a friend, brother or sister). Rose chose to explain a game.



Two things are apparent from Rose's story. First, it is apparent that she does not understand the organizational processes underlying this particular type of exposition--explanation--because she does not explain the game in terms of what to do first, second, third, and so forth. Second, Rose's story reflects her self-perceived low status. Rose was unable to place herself in the position of someone who teaches a game to someone else. Instead, she changed the directions to conform to her self-perceived low status. Rather than assume the role of a teacher teaching someone how to play a game, Rose assumed the role of a learner and wrote: a "fraind [sic] had to teach me a game."

More than most students, remedial and special education students have difficulty seeing themselves in the role of informants. In many instances, students' self-perceived low competence is reinforced by the remedial instruction these students receive because they are more often the recipient than giver of information in the classroom. Yet without the successful assumption of an informant role, special education students will never master the communication skills that underlie expository writing.

As seen in Rose's story, self-perceived competence is a learner characteristic that can negatively affect expository writing performance. However, the characteristics of the writing program in which students participate also can contribute to students' ability or inability to successfully assume informant status. Graves (1983b) suggests that the writing environment best suited to develop students' informant skills is one in which students write for an expanded audience and where the communicative function of writing is clear. One writing environment that has been shown to accomplish this has students write for an audience of

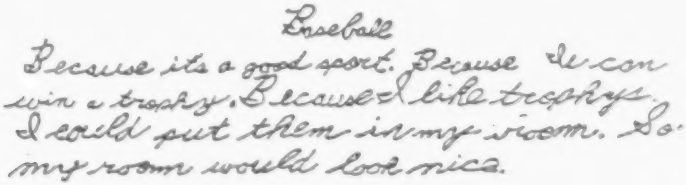
their peers, teachers, and family through the publishing of papers and through classroom-wide sharing of papers (Calkins, 1983).

Unfortunately, the classroom-wide sharing of papers is an infrequent occurrence compared to the more widespread practice of writing for the teacher as the sole audience for students' writing. Our observations of special education instruction suggested that, with only rare exceptions, teachers were the primary audience of children's writing. Yet when teachers are the sole audience, students come to believe that writing involves guessing or matching the teachers' standards of rightness and wrongness, and they come to view writing as test taking. In fact, in a recent study (Raphael, Kirschner, & Englert, 1986b), it was found that students in teacher-centered writing programs reported that writing was for the purpose of schoolwork or for teachers to assess what they knew. They did not mention writing as communication. Not surprisingly, they were less motivated to write than students in peer-oriented writing programs.

An even more serious problem can result when adults and teachers are the sole audience for children's writing. When students write for a knowledgeable rather than naive audience, they learn merely to mention ideas or to omit details because they assume their adult readers are quite capable of inferring the implied information. Some young writers, believing that adults already possess the information they are expected to report, become even more entrenched in the view that writing is a test-taking activity. Such writers believe that their written product is being evaluated on the basis of their ability to provide the correct answer to the adult's questions or to match the adult's preconceived schema for that topic. Under

these circumstances, writers may produce sketchy responses or fail to report their topics adequately.

Joe's story illustrates the type of writing that students produce when they come to view writing as test taking rather than as an opportunity to inform readers. When Joe was asked to write a paper describing something about which he knew a lot, he selected baseball:


Baseball
Because its a ~~good~~ sport. Because he can win a trophy. Because I like trophys. I could put them in my room. So my room would look nice.

Essentially, Joe's writing suggests that he treats writing as answering the teachers' questions. The answers evident in his paper--"Because it's a good sport. Because I can win a trophy. Because I like trophys [sic]"--suggest that he is answering the question, Why do you like baseball? However, this question and the purpose for his paper is never stated or introduced to the reader. Joe's paper also suggests that he is unaccustomed to writing for the naive reader or peer because he omits details or explanations. He doesn't explain why it's a good sport or how he can win a trophy, and he makes no explicit links between the ideas in his paper. Yet if peers had read his paper, they would undoubtedly question Joe about whether he plays on a baseball team and whether his team has won a trophy. In sum, Joe is so far removed from a real audience that he does not anticipate the kinds of problems or questions they might have when they read his paper.

Bereiter and Scardamalia (1982) suggest that the ability to sustain language and thought in the absence of a communication partner is one of the critical dimensions that distinguishes composition from other language acts. In conversation, for example, the communication partner presents continuous cues that jog the memory of the speaker and prompt him or her to elaborate on the topic. Questions such as "How did you happen to land a job in Maryland?" or "Why did you choose to buy a beagle?" elicit information from the speaker and inform the speaker of the needs of the listener. In composition, all of these supports are removed and the writer must infer the questions and needs of the reader. Unless the writing environment is structured to provide direct communication and collaborative links between writers and readers, writers must make rather quantum leaps from the communicative processes involved in conversation to those involved in composition. When the audience is limited to the teacher, students do not receive the same continual communication prods because the teacher does not represent a naive audience. For the younger and poor writers who lack the capacity to take the reader's point of view (Bereiter & Scardamalia, 1982), this distance may only hamper their acquisition of mature writing skills.

Thinking and Organizational Strategies

The stories of Joe and Rose also underscore the importance of the third writing goal. Special education students need strategies to help them organize their papers. Neither Joe nor Rose structured their papers successfully to produce cohesive, well-organized prose. Expository text is usually organized in specific ways known as text structures. Several classification systems have been identified (e.g., Armbruster & Anderson,

1984; Meyer, 1975) that detail the various ways texts are organized. Some of the more frequently mentioned structures are explanation, comparison/contrast, problem/solution, and description.

One factor that distinguishes one text structure from another is the set of questions each structure is designed to answer. For example, comparison/contrast text answers such questions as (a) What is being compared? (b) On what are they being compared? (c) How are they alike? and (d) How are they different? Explanation texts, in contrast, answer the questions (a) What is being explained? and (b) In what order do the steps occur? (i.e., What happens first? second? third? . . . last?). Successful writers are not only aware of the questions different structures are designed to answer, they are familiar with such conventions as the key words and phrases that signal their readers to information answering the questions, such as "however" or "in contrast to" in comparison/contrast texts; or "first," "second," or "next" in explanation texts.

Thomas, Englert, and Gregg (1987) conducted a study in which they gave special education students paragraph stems that conveyed a particular text structure. For example, students were shown a paragraph stem that began: "There are many ways to travel across town. One girl used her bike to get to school." Students then were asked to finish the paragraph by writing two additional sentences. The authors tried to assign children an informant status by asking them to pretend that they were the school editor who needed to finish newspaper stories by writing two sentences that fit closely with the paragraph stems and that gave the reader as much information about the topic as possible. Paragraph stems and samples of students' responses are shown in Table 1.

Table 1

Sample Student Responses to Paragraph Stems

Paragraph Stems	Student Response(s)
There are ways to travel across town. One girl used her bike to get to school.	a. Like you could go to Whiteville. b. The town is long, but you have to g c. I like to go to school every day. d. Some people travel to New York.
ogs look very different from birds. ogs have noses, birds have beaks.	a. Dogs are big. Cats are small. b. The dogs will kill the birds. c. I like dogs better than birds. d. Dogs eat birds.

The results of the study suggested that, when special education students read the paragraph stems, they had no expectancies for what would follow. They typically approached writing as an associative process in which any single idea might stimulate the subsequent idea. For example, when students read the paragraph stem: "There are many ways to travel across town. One girl used her bike to get to school," they thought of anything they knew related to any idea (e.g., school) and wrote it down ("I like to go to school every day"). Similarly, when students read the stimulus stem about how "dogs look very different from birds," they thought of any ideas about the two creatures that came to mind (i.e., "Dogs eat birds"). Whereas more able writers approached the writing process in a top-down fashion, starting with a text structure or organizational plan and then finding the words to complete the plan, special education students seemed to be linearly

associative, progressing from word-to-word or from sentence-to-sentence. They focused on what to say next rather than on text structure as an organizational frame (a) for generating ideas and (b) for tying each succeeding idea back to the major premise.

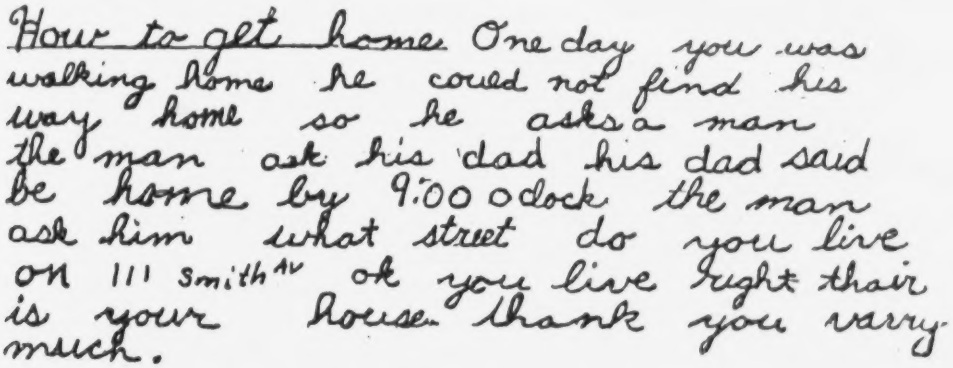
Jere and Mark are two students in the current descriptive study who further exemplify the kind of organizational difficulties that students experience in expository writing. In the case of Jere, we see the associative writing strategy evident in longer compositions. When Jere was asked to write about a topic that he knew well, he produced the following story:

I like to play out side rain
park swim out of town circus
play in insind bike mophed
I liketoride in a car
I like to go in a truck

Jere's story contains ideas that are clearly comprehensible. Though Jere's story contains random words, he obviously can produce sentences. The larger problem evident in Jere's story is that he views writing as an associative process--one in which he writes ideas about a topic in any order in which they come to mind. It is apparent that Jere does not view writing as communication because he shows little concern for the reader who must do all the work to link his randomly organized ideas.

Although Jere's story is an extreme case, there are other writers who show the same difficulty in using text structure as an organizational tool even though their ideas are more coherent. Mark's paper is shown below. Mark was asked to write an explanation paper--he could explain how to play

a game to someone else or he could give directions to his house. Mark chose to give directions to his house. What is remarkable about Mark's composition, however, is his failure to give step-by-step explanations telling someone how to get to his house. Mark starts to write a story, but when he gets to the part about directions to his house, he gives the entire set of directions at once, writing, "Ok you live right thair [sic] is your house."


Hour to get home One day you was walking home he coved not find his way home so he asks a man the man ask his dad his dad said be home by 9:00 o dock the man ask him what street do you live on 111 Smith Av ok you live right thair is your house thank you varry much.

More than the other students in the study, special education students had difficulty following the text structures in expository writing. In terms of the percentage of total organizational points possible for writing comparison/contrast and explanation papers, special education students had more difficulties than normally achieving students in writing informative text for both comparison/contrast (special education = 25%, normally achieving = 63%) and explanation (special education = 36%, normally achieving = 51%) papers. These data suggested that special education students needed to learn organizational frameworks that would help them systematically retrieve relevant ideas from background knowledge and systematically organize and revise those ideas to produce well-organized coherent prose.

Before describing a writing program designed to improve students' informational writing skills, it is important to note that the organizational problems apparent in children's compositions are not confined to writing but extend to reading comprehension. When students are insensitive to text structure, they fail to recognize it in printed materials and neglect to use it as a basis for processing chunks of information and for constructing meaning while reading. The reading performance of such students suggests they approach text as if it contained random details that must be memorized and recalled (Taylor & Samuels, 1983). Consequently, when asked to recall the passage and write "everything you can remember," they recall isolated pieces of information that do not fully reflect the organization or meaning of the passage.

The preliminary results of the comprehension data in our current study suggests that special education students have particular difficulty using the organization in passages to recall information in expository materials. The following examples illustrate the way in which comprehension is affected. Mark was asked to write what he recalled from a passage.

Mark's Recall (unedited)

> I remember the part were the cowboy has a horse in a small stable lock. It is only one door so the horse gos in, out. The cowboy wates to a bell raings in he has to jump off in run to a safe place. When the rider is off the horse quiets down in goes in the stable.

Table 2 provides an outline of the original passage with corresponding checks to indicate the ideas from the passage contained in Mark's recall. The outline in Table 2 suggests that Mark is largely insensitive to text structure and that this affects his ability to comprehend chunks of essential ideas.

TABLE 2

Outline of Bronco-Riding Passage Indicating Mark's Score

Initials _____ ID _____

	Score
1. One way that cowboys have fun is at a rodeo	
a. Cowboys are men who work on cattle ranches	
b. Rodeos are games for cowboys	
c. In these games, cowboys show how good they are at their job	
2. One of the favorite events/games is called bronco-riding	
a. Bronco-riding tests how well a cowboy can ride a horse	
b. Cowboy has to ride a wild horse as it jumps and kicks	
c. Cowboy loses if he falls off	
3. There are several steps the cowboy follows in bronco-riding (EVENTS)	
a. The horse is put in a very small stall	✓
b. The cowboy climbs on the horse's back	
c. Cowboy sits on the saddle	
d. He holds the saddle with one hand	
e. His other hand is held high in the air	
f. He says "I'm ready".	
g. People open the gate	
h. The horse comes out kicking and jumping	
i. The horse jumps hard to get the cowboy off	
j. The cowboy holds on as long as he can	
k. The bell rings to tell the cowboy that he can jump off & win	✓
l. The cowboy lets go of the horse	
m. He jumps to the ground and runs away	✓
n. The horse quiets down & is led back to the stall	✓
TOTAL SCORE	4
MAIN IDEA SCORE	0

When students like Mark cannot bind ideas into chunks of related ideas (e.g., place or setting, steps of process, actor or agent, and so forth), they recall only isolated facts or random details. In this fashion, knowledge of text structures significantly affects not only the quality of children's compositions but children's comprehension as well. For this reason, instruction that imparts information about text structure and the organization of ideas may positively impact both children's ability to compose as well as comprehend expository materials (Raphael, Englert, et al., 1986).

Expository Writing Program Components

The problems found in students' writing suggest that teachers must establish a writing environment where students write frequently and where the communicative function of writing is clear. This writing environment is more likely to be established when students engage in sustained writing and write as informants for an expanded audience that includes peers. In addition, students must acquire an understanding of how to organize and control the writing process through the use of text structures. In this final section of the paper, we will (a) discuss the general components of the expository writing program that lend themselves to the establishment of a writing environment where students perceive themselves to be authors and informants, and (b) describe the specific components of a text structure instructional program that have been used in the past with regular education students (Raphael, Englert, et al., 1986) and that are presently being used with regular and special education students. The components of this specific writing program focus on helping students use text structures in planning, organizing, writing, editing, and revising their expository papers.

General Writing Components

Daily writing. As a first step, given the difficulties LD students have in sustaining their thinking and writing, the writing program should allow students to write on a daily basis. Regular and special education teachers often believe that their special education students should not be asked to write connected text because their students have such difficulty writing. Yet the limited output of Max and the majority of other special education students suggests that special education students are likely to need more, not fewer, sustained writing opportunities if they are to learn to access and retrieve information fluently from background knowledge.

The shift to daily rather than weekly or monthly writing is an important goal. Just as reading is perceived to be an essential activity in the school curricula that students engage in daily, writing must be viewed as an important curriculum objective in itself, rather than secondary to other subject areas. Estimates of the amount of time that students write paint a rather dismal picture of writing instruction in American schools. On the average, students in the elementary grades write only once every eight days (Graves, 1985). Even at the high school level, where one would expect students to participate in sustained thinking and writing activities, only 3% of the time is spent in writing activities of a paragraph in length or longer (Applebee, 1982, 1984). This suggests that writing is not perceived to be an important end in itself. Many teachers, also, do not have strategies to integrate writing instruction in other content area subjects in order to improve students' critical thinking, reasoning, communication, and comprehension abilities.

Our observations in special education classrooms where Max and other students received writing instruction suggested that limited opportunities

for frequent writing cannot be dismissed as one possible contributor to students' writing difficulties. For the most part, writing in special education classrooms consisted of drill activities aimed at improving mechanical skills, but there was little direct instruction aimed at increasing students' abilities to sustain their writing and thinking. Only one of the eight special education teachers specifically taught strategies for retrieving information from background knowledge, and only two of the eight teachers provided more than once-a-week writing opportunities.

For students with writing problems, however, daily writing may be particularly important. Frequent sustained writing can provide the essential practice that students need and make clear to students the importance of organizing one's ideas beyond individual words and sentences. An added benefit for students who write frequently is their potential acquisition of critical "writing to learn" skills that involves their ability to access more completely their background knowledge. These skills involve their ability not only to access appropriate background knowledge but to consider or apply this knowledge in deciding what new information can be gained (Ogle, 1986). Such abilities have been found to underlie successful performance in expository reading as well as expository writing in content area subjects.

Sustained writing. Second, the writing program should allow sustained writing opportunities. If students are provided with sustained writing opportunities, they will have ample time to develop their ideas, explore their knowledge about a writing topic, and elaborate or reflect on that knowledge over time. Opportunities for students to explore and study their topics adequately will inevitably require more than a single lesson period. Moreover, not all students will complete their papers on chosen topics at

the same time. Whereas some students may complete their papers in a single period, choosing not to work on them any longer, other students may wish to research their topic and work on the same paper for a week or more. Regardless of these individual differences, however, all students should have the extended time they need to explore and research their chosen topics adequately. Students should be encouraged to take ideas from previous papers, reflect on those ideas, and modify or add new ideas. Students will need time to engage in the entire writing cycle, and this can only occur when they are provided with sustained writing opportunities as well as opportunities to reflect on the same composition over time.

In the typical classroom, however, students write for 5-15 minutes on an assigned topic, then turn the paper in to the teacher for a grade (Deford, 1985). During language skills instruction and during content area subjects, writing consists of producing short paragraphs or sentences in response to isolated questions or activities. Unfortunately, when students write only isolated sentences or single paragraphs, they never learn to sustain their thinking about a topic or systematically draw upon their vast store of background knowledge to produce complete compositions. In fact, Scardamalia and Bereiter (1986) suggest that thinking of what to say and accessing content for a topic are two of the more serious writing problems of young writers. When writing curricula stress teach basic sentence-and paragraph-writing skills, the critical thinking and organizational strategies that underlie coherently organized connected prose may not be taught.

Informant status and peer collaboration. Third, writing programs should endow children with an informant status by emphasizing the communicative function (i.e., purpose and audience) of writing. Purpose

can be created by publishing students' writing. In addition, rather than writing solely for teachers, students need to assume more control for the writing process by selecting their own topics and by writing about those selected topics for peers (Graves, 1983a). To further heighten students' sense of audience, writers should collaborate directly with peers who can react to their papers as peer editors or consultants (Graves, 1983b).

There are three benefits to writers and readers as a result of working in collaborative writing arrangements with peers. First and foremost, peers can serve as external monitors for what works and what does not. Peers can help writers regulate text processing by creating a conscious awareness that a particular comprehension problem or question exists. Through peers' questions, writers begin to recognize when their writing is clear, when it is not clear, and how it should be corrected. In this way, peers point out comprehension difficulties in a way that provides immediate feedback to writers that helps them "see" and "hear" what works and what doesn't work.

Gradually, as a result of this exchange, students learn the interrelationship between writing (author) and reading (audience). Thus, collaboration integrates the comprehension and composing processes, and readers and writers alike refine their comprehension monitoring and composition skills in the context of learning to write. For poor comprehenders, the development of comprehension monitoring skills may have an important generalized effect on their ability to recognize and correct comprehension failures in other reading contexts (Raphael, Englert, et al., 1986). For poor writers, the transfer of control for monitoring text gradually passes from the peer editor, who initially serves at first as the external monitor, to the writer, who develops his or her own internal monitor for the types of problems and questions experienced by the reader.

Second, peers' questions reinforce what the writer knows and thus affirms the writer's role as an informant. Peers typically do not know the answers to the questions they ask (e,g., "What does your box turtle eat?"), so the writer becomes the expert who knows his or her topic best. This enhances the writer's self-competency (I know something and someone is interested in what I know), while turning the writer back onto his or her topic for further study and research. Students begin to conduct further inquiry into topics as they search for answers to questions they could not answer with the information from their background knowledge. In this sense, peers can instill in writers a purpose and motivation to learn more about a topic and lay the basis for critical writing to learn strategies.

Third, peers' questions develop writers who can sustain writing and apply their knowledge of questions to the various subprocesses in writing; that is, questions that come up repeatedly are potentially internalized by the writer and guide his or her thinking during the planning, drafting, and revising of their compositions. In prewriting, for example, questions begin to serve a generative purpose by telling the writer what to write about and what elements to include. During composing, questions keep writers going until their writing is complete, thereby lessening the likelihood that writers will prematurely terminate their discussion of the topic or leave gaps for the reader to fill. Finally, during revision, questions help writers know what and how to revise. When students write for their peers or for publication, the need for reflection and revision of ideas has a communicative purpose and function.

Specific Components for Teaching the Expository Writing Process: Text Structure Instruction

Finally, although all of the aforementioned writing components are necessary, they are not sufficient to develop students' expository writing skills. Students need to learn to monitor and control specific organizational and thinking strategies for prewriting, drafting, peer editing, and revising. One strategy that students can use as a basis for monitoring and controlling the writing process is their knowledge of text structure. For example, in planning their compositions, knowledge of text structures can help children activate text schemata with well-defined slots or nodes that then serve as prompts that help them fill out the schemata with appropriate details from their own experiences. This is particularly helpful to those students who have difficulty accessing information from background knowledge. Similarly, knowledge of text structures can help children monitor and revise their text as they reread their compositions looking for inconsistencies or missing information. Insofar as students are aware of text structures, they can more accurately plan, organize, and edit their compositions.

In the following section of the paper, we will describe a specific expository writing program that we have adapted from previous research with regular education students (Raphael, Kirschner, et al., 1986b). The program focuses on two aspects related to the development of expository writing ability: first, the social context in which students write, including the importance of audience in planning, composing, and editing compositions; second, the role of text structure in planning, organizing, drafting, and revising papers.

An important support system that we have found useful to teachers and students in the implementation of the writing program is the use of think

sheets. Specifically, think sheets are materials that mimic the mature organizational and thinking strategies in each of the writing subprocesses (e.g., planning, organizing, editing, peer editing, revising). Each of the think sheets poses questions that prompts the writer to consider certain strategies related to the performance of a specific writing subprocess. For example, the think sheet for planning poses questions related to audience and organization. During revising, writers are encouraged to ask questions about their own compositions and think of additional information that can be included. To assist writers further in clearly separating and labeling the distinct thinking and strategies of skilled writers, we have found it helpful to color code the think sheets and label them "planning", "organizing," "writing," "editing," and "revising" (POWER).

Planning. The planning think sheet is intended to help writers focus on audience, purpose and background knowledge (see Appendix A). For audience, students are asked to consider Who ("Who will read my paper?"). Next, students consider purpose (e.g., to tell a story, convey information, or persuade) through such questions as Why ("Why am I writing this?"). Finally, students access information about topics from background knowledge and organize that knowledge by asking themselves such questions as What ("What do I know about the topic?") and How ("How can I group/label my facts?").

Organizing. Next, students organize the ideas gathered during planning in the organizing step. The organizing think sheet provides a pattern guide representing the text structure being studied. It is a graphic organizer for a given text structure that contains the questions and key words associated with a specific text structure. For example, in writing a comparison/contrast paper students fill in the organizing think sheet with

the answers to such questions as: "What is being compared/contrasted? "On what?" "How are they alike?" "How are they different?".

Different organizing think sheets should be used for each of the text structures that students study. For example, the organizing think sheet for the sequence of explanation text structure contains the questions: "What is being explained?" "What are the steps in the process?" i.e., "What happens first?" "What happens second?" "What happens third?". . . "What happens last?" (see Appendix B). For a narrative or story structure, the organizing think sheet would contain the questions "Who is the story about?" "What is the setting?" "What is the problem confronting the main character?" "How does the main character respond?" "How does the story end?" Students complete the organizing think sheet by filling in the pattern guide with information from their background knowledge and from their brainstormed ideas on the planning form.

Writing. Once students complete planning and organizing activities, they write their first draft. We find it helpful to use colored paper (e.g., blue) for first drafts so that it looks decidedly different from the final copy. This helps ensure that students do not treat the first draft as the last draft. Teachers need to model in a think-aloud procedure how to transfer knowledge from the planning and organizing page to the first draft page. On all first drafts, students are told not to worry about spelling or other grammatical problems, that these issues will be addressed before the final copy.

Edit: Self-editing first draft. The self-editing step is designed to promote students' awareness that writers need to be critical of their own writing and to determine the areas on which they need self-clarification and or assistance. Rereading the first draft and planning for editing is

very difficult for most students. Too often, students view revision as merely changing spelling or copying over their first draft so that it is neater in appearance. Many students also view revision and editing as punishment for careless work. Thus, a critical aspect of using the edit think sheet is to begin to shape a more productive and purposeful view of the revision process (see Appendix C).

To complete the self-editing process, students first look back at their papers and star the parts of their paper they like best, and anticipate readers' questions by putting question marks by the parts that might be unclear. Next, the edit think sheet directs writers to rate the extent to which they which they answered the text structure questions (e.g., Did I . . . "Tell what was being explained?" "Tell what things you need?" "Make the steps clear?" "Use key words?" "Make it interesting [to the reader]?"). This rating scale contains evaluation criteria that matches nearly identically the criteria contained on the organizing think sheet. Thus students learn to self-monitor and self-evaluate to determine if they followed their organizational plan. Students' rate themselves according to three simple self-rating choices ("yes," "sort of," "no"). Finally, writers are asked to think of two or more questions to ask their peer editor. This encourages students to go to their editors looking for help on specific questions.

Edit: Peer editor. In the peer-editing stage, writers read their papers to a peer editor while the editor listens. Peer editors are asked to summarize the paper. This is often helpful to the author because the peer editor's summary may indicate that the information that the author thought was important was not conveyed in the paper. Next peer editors complete an evaluation process that is essentially the same as that

performed by the writer. However, whereas the edit think sheet is intended to elicit self-clarification, the editor think sheet elicits audience clarification (see Appendix D).

To complete the evaluation process, editors look back over the draft and star the parts they like best and put questions marks by the parts that are unclear. They rate the paper by answering the text structure questions (e.g., Did the author . . . "Tell what was being explained?" "Tell what things you need?" "Make the steps clear?" "Use key words?" "Make it interesting [to the reader]?"). Then the peer editor and author talk about their respective evaluations and brainstorm possible ways to make the paper even better.

Revise. Finally, writers plan revisions. During revision, think sheets help the author focus on (a) suggestions provided by the peer editor, (b) editors' suggestions the writer plans to follow, and (c) additions to the paper that could make it more interesting and easier to follow (see Appendix E). An important element in this think sheet is the emphasis on the need for authors to make decisions. Writers are asked to list all suggestions their editor proposed and to consider each one. However, the paper or text is still the property of the author, not the editor. Thus the author need make only those changes that he or she thinks will enhance his or her paper. Writers then are asked to make revisions directly on the first draft.

Teachers will need to teach students how to revise papers by modeling how to insert or change the order of information and by giving the rationale for changes. It is at this point that teachers can hold a conference with students to help them monitor their papers for spelling and grammatical accuracy. The emphasis on mechanics should provide students with the tools

for enhancing the clarity of the paper to the reader. With all revision techniques, however, teachers should model the strategies that will help students know when and how to revise their papers. Next writers write the final draft directly on a final-draft form.

Final Draft. The final draft think sheet is merely white lined paper. After students make their revisions on their first draft, they will need to recopy the paper for presentation to their audience or for submission for publication. The white lined paper serves as a marker for "closure" of the writing process.

Teaching writing using think sheets. In using these think sheets in the long-term instructional study, we found they served two important functions: one for teachers, the other for students. First, many teachers may have had little or no formal methods course work or training in teaching writing. Second, writing is not an activity in which many teachers frequently participate, and thus they may lack enough first-hand knowledge of effective writing strategies. Thus, for teachers, the think sheets provided guidance in deciding what to teach during their writing program. Similarly, students have frequently had little or no experience with extended writing and may lack awareness of strategies for planning, organizing, drafting, editing, or revising their papers. Thus, think sheets can be used to make strategies of the writing process more visible.

Nevertheless, think sheets are to be used as a temporary support by teachers and students, reminding them of appropriate strategies for different aspects of the writing process. This is a particularly important point in that the writing process is not linear. Rather, the strategies prompted by the think sheets occur throughout writing. Writers plan, draft, then perhaps go back to additional planning, then ask for peer response

before continuing their drafting. Thus, while initially teaching the components of the writing process in a linear fashion, the overall goal of the program is to develop teachers who are comfortable knowing about and teaching the writing process and students who have internalized appropriate strategies. Thus, the long-range goal is to see students become skilled writers who no longer need the think sheets for support. When the think sheets have served their purpose, they should no longer be necessary and should be gradually removed.

To enhance the likelihood that students will independently employ and regulate the strategies for each writing subprocess, teachers should encourage students to internalize the questions that guide thinking in each of the writing subprocesses including planning (e.g., "What am I to do?" "What do I know about this topic?"), organizing (e..g, "What text structure should I use?" "What questions does this text structure answer?" "What key words and phrases should I use?") drafting (e.g., "Translate my plan into writing), editing, and revising ("Evaluate my paper-- Did I answer the text structure questions?" Did I answer the readers' questions?" "Is my paper interesting?" "How can I fix it?"). Teachers should first model how to use these self-questions in each of the writing subprocesses in a think-aloud procedure. Teachers can do this by thinking-aloud--asking the questions and verbalizing the answers or steps of the writing strategy-- as they perform the writing subprocess for students to see and hear. By asking questions and verbalizing reasons why, the steps of the writing strategy help writers communicate a message effectively, teachers make visible these invisible subprocesses.

Teachers then should monitor the clarity of students' thinking by having students think aloud just as the teachers thought aloud when they

modeled the writing subprocesses. Teachers should monitor the quality of students' dialogue and step in when the students' dialogue slacks off. This assures that students master the inner thinking that regulates and directs performance during writing. To promote transfer, teachers should model the use of these self-questions not only with respect to the use of the think sheets, but in general writing applications when students must independently plan, organize, draft, and revise their compositions.

Summary

The teaching of expository writing involves the teaching of strategies for performing the writing process as well as enhancing students' awareness of the role of audience and text structure in planning, organizing, writing, editing, and revising their compositions. Throughout the teaching process, the teacher has a critical role as an agent who needs to monitor performance and who must model the dialogue or inner thinking that directs strategy use in each of the writing subprocesses. The long-term goal is not just the improvement of students' written products but the improvement of students' understanding of the processes that underlie how those products are produced. This happens when teachers and students alike participate in a communicative context where readers and writers alike understand the informants' role and possess the necessary self-regulating tools to gather and organize expository information strategically in planning, composing, and revising their expository compositions.

Special education and regular education students also experience a number of problems that impede the development of advanced writing skills. These problems relate to their ability to write fluently and sustain their writing; assume an informant status in communicating expository information; and use basic thinking and organizational strategies to gather, organize,

and compose their expository ideas. We propose that such problems can be remediated through instruction that teaches strategies associated with planning, organizing, drafting, editing, and revising. Such strategies are best taught when the teacher assumes an active role as a mediator who models strategies for writing and who evaluates strategy acquisition by monitoring changes in children's thinking and dialogue as well as changes in their compositions. Finally, we submit that these teaching aims are best accomplished in a writing environment where students share their writing and thinking with peers. In this writing environment, the audience and communicative purposes of writing are clear, and it legitimizes the informant role that the expository writer must assume for writing success.

References

Applebee, A.N. (1982). Writing and learning in school settings. In M. Nystrand (Ed.), What writers know: The language, process and structure of written discourse (pp. 365-381). New York: Academic Press.

Applebee, A.N. (1984). Contexts for learning to write: Studies of secondary school instruction. Norwood, NJ: Ablex.

Armbruster, B.B., & Anderson, T.H. (1984). Producing considerate expository texts: Or easy reading is damned hard writing (Reading Education Rep. No 46). Urbana: University of Illinois, Center for the Study of Reading.

Bereiter, C., & Scardamalia, M. (1982). From conversation to composition: The role of instruction in a developmental process. In R. Glaser (Ed.), Advanced instructional psychology (Vol. 2, pp. 1-64). Hillsdale, NJ: Erlbaum.

Calkins, L.M. (1983). Lessons from a Child. Exeter, NH: Heinemann.

Deford, D. (1985). Classroom contexts for literacy learning. In T.E. Raphael (Ed.), The contexts of school-based literacy (pp. 163-180). New York: Random House.

Graves, D.H. (1983a). Break the welfare cycle: Let writers choose their topics. In P.L. Stock (Ed.), Forum (pp. 98-101). Upper Montclair, NJ: Boynton/Cook.

Graves, D.H. (1983b). Writing: Teachers and children at work. Exeter, NH: Heinemann.

Graves, D.H. (1985). All children can write. Learning Disabilities Focus, 1(1), 36-43.

Meyer, B.J.F. (1975). The organization of prose and its effects on memory. Amsterdam: North-Holland.

Ogle, D. (1986). K-W-L: A teaching model that develops active reading of expository text. Reading Teacher, 39, 564-571.

Raphael, T.E., Englert, C.S., & Kirschner, B.W. (1986). The impact of text structure and social context on students' comprehension and production of expository text (Research Series No. 177). East Lansing: Michigan State University, Institute for Research on Teaching.

Raphael, T.E., Kirschner, B.W., & Englert, C.S. (1986a). Text structure instruction within process-writing classrooms: A manual for instruction (Occasional Paper No. 104). East Lansing: Michigan State University, Institute for Research on Teaching.

Raphael, T.E., Kirschner, B.W., & Englert, C.S. (1986b). Students' metacognitive knowledge about writing (Research Series No. 176). East Lansing: Michigan State University, Institute for Research on Teaching.

Scardamalia, M., & Bereiter, C. (1986). Research on written composition. In M.C. Wittrock (Ed.), Handbook of research on teaching (3rd ed., pp. 778-803). New York: Macmillan.

Taylor, B., & Samuels, S.J. (1983). Children's use of text structure in the recall of expository material. American Educational Research Journal, 20, 517-528.

Thomas, C.C., Englert, C.S., & Gregg, S. (1987). An analysis of errors and strategies in the expository writing of learning disabled students. Remedial and Special Education, 8(1), 21-30.

Appendix A

Planning Think Sheet

Name _____ Date _____

TOPIC: _____

WHO: Who am I writing for?

_____

_____

WHY: Why am I writing this?

_____

_____

Name _____

WHAT: What do I know? (Brainstorm)

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____

HOW: How can I group my ideas?

_____ _____
: _____ : : _____ :
: _____ : : _____ :

_____ _____
_____ _____

_____ _____
: _____ : : _____ :
: _____ : : _____ :

_____ _____
_____ _____

How will I organize my ideas?

____ Comparison/Contrast
____ Explanation
____ Problem/Solution
____ Other

Appendix B

Organizing Think Sheet

Explanations

What is being explained?

In what order do things happen?

First, (1st)

Then, (2nd)

Then, (3rd)

Then, (4th)

Finally (last)

Clues: who does it, things you need, how you do it

Appendix C

Edit Think Sheet: Explanation

Name _____ Date _____

Read To Check Your Information. Reread my paper.

What do I like best? Put a * by the parts I like best)

_____

_____

What parts are not clear? Put a ? by unclear parts)

_____

_____

Question Yourself to Check Organization. Did I

Tell what was being explained?	YES	sort of	NO
Tell what things you need?	YES	sort of	NO
Make the steps clear?	YES	sort of	NO
Use key words (first, second)?	YES	sort of	NO
Make it interesting?	YES	sort of	NO

Plan Revision. (look back)

What parts do I want to change?

1. _____

2. _____

Write two or more questions for my editor.

1. _____

2. _____

Appendix D

Editor Think Sheet: Explanation

Author's Name _____

Editor's Name _____ Date _____

Read to Check Information. Reread the paper.

What's the paper about?

_____

_____

What do you like best? Put a * by the parts you like best.

_____

_____

What parts are not clear? Put a ? by unclear parts.

_____

Question Yourself to Check Organization. Did the author

Tell what was being explained?	YES	sort of	NO
Tell what things you need?	YES	sort of	NO
Make the steps clear?	YES	sort of	NO
Use key words (first, second)?	YES	sort of	NO
Make it interesting?	YES	sort of	NO

Plan Revision.

What two parts would you change?

1. _____

2. _____

One thing that would make it more interesting is _____

_____

Appendix E

Revision Think Sheet

Name _____ Date _____

1. What suggestions did your editor give?

a. _____

b. _____

c. _____

d. _____

e. _____

Put a check next to the suggestions you will use.

2. How will you make your paper more interesting?

_____

_____

_____

3. Go back to your first paper and make your revisions.

Revision Symbols

Type	Symbol	Example
Add Words	^	The girl is my sister.
Take words out	———	The woman ~~has~~ tried to give
Change Order		He had go to home
Add Ideas here		The dog is friendly. Tell which dog.